

Volume V, Section 1 - COD School Testing Guide

Introduction

The School Testing Guide is intended for all Full Participants in the COD System. Included in this year's version of the School Testing Guide are lessons learned from the 2004-2005 Award Year of COD School Testing. This section provides insight from the schools that participated in COD School Testing. Schools were both Phase-In and Full Participants.

Purpose

The purpose of school testing is to provide schools, third-party servicers, and software vendors an opportunity to test business processes and system software with the COD System prior to the transmission and processing of actual production data. School testing enables simpler, faster, and less costly issue identification and resolution in a low-volume, controlled test environment. It also allows schools, third-party servicers, and software vendors the opportunity to make corrections or enhancements to software applications and processes prior to entering into the "live" production environment. The goal of School Testing is to make the transmission of production data smoother and reduce the risk of production problems.

Note: Throughout this document, the term "schools" is used to indicate any entity that is participating in COD School Testing and includes schools as well as entities that process on behalf of schools (such as software vendors and third party servicers).

Scope

COD School Testing is broken down into two distinct phases of testing for the upcoming award year and Unstructured Testing is available year round. The unstructured testing environment will be updated with new code in conjunction with a major release of COD. Currently the code reflects the set up for processing 2004-2005 records. The major release of the 2005-2006 software will be Mid-March 2005.

- Phase I – Common Record Manual Verification
- Phase II – Structured Application Testing
- Unstructured Testing

The phases are described in more detail later in this document.

COD School Testing is available to all entities that participate in the COD process. Schools are not required to test with COD, but are encouraged to participate in Phase I testing. Schools should refer to the *Section 2 Full Participant School Test Case* document for more information. The test case document contains descriptions of the test data that schools will send to and from COD, test execution guidelines, and structured test cases with multiple testing cycles.

Full Participants that use a third-party servicer do not need to test with COD. Instead, the third-party servicer can complete the test on behalf of their customers.

Schools that are new participants of the Direct Loan and/or Pell Grant Programs must complete school testing with COD before submitting data into the production environment.

All entities that wish to participate in COD School Testing must submit a formal sign-up sheet to the COD School Relations Center and be scheduled for each phase of testing.

Test Phase Descriptions

Phase I - Common Record Manual Verification

1. Who should participate?

The Common Record Manual Verification phase of testing is available to all schools.-

2. What is the purpose of Phase I testing?

The purpose of the Common Record Manual Verification testing is to ensure that the school's XML Common Record is well formed and properly structured according to the rules of the 2.0d XML Common Record Schema. The 2.0d schema is available on the IFAP web site at: <http://www.ifap.ed.gov/cod/COD0405CRXMLSchema2.0d.html>. The COD team manually reviews a Common Record document emailed to the COD School Relations Center (codsupport@acs-inc.com) by the school and assists the school in the identification of potential updates to their Common Record submissions. This testing does not validate the data submitted within the Common Record. For this phase of testing, only two student records should be sent in the Common Record.

3. When does Phase I testing take place?

Phase I testing is available from **January 3, 2005 through May 31, 2005**. Phase I testing is required for all schools prior to participating in Phase II testing.

4. How do schools sign up for Phase I testing?

Schools must complete a signup document in order to participate and schedule a testing window with the COD School Relations Center. The signup document is located at the end of this guide and on the COD website, www.cod.ed.gov. The completed document must be emailed to codsupport@acs-inc.com, or faxed to the COD School Relations Center, 1-877-623-5082.

5. What do schools need to do when they complete Phase I testing?

Once schools have completed Phase I, they must contact the COD School Relations Center to schedule Phase II testing. **IMPORTANT:** A second signup document is not required to participate in Phase II testing.

Phase II - Structured Application Testing

1. Who should participate?

All schools that have completed Phase I (Manual Verification) testing.

2. What is the purpose of Phase II Testing?

The purpose of Phase II-Structured Application Testing is to ensure that schools can send, receive, and process batches of records using comprehensive input instructions with detailed expected results issued by COD. Schools use a test ISIR file supplied by COD that creates a test data set of students to use with the structured test cases.

During this phase, schools send Common Record documents to COD and receive Common Record receipts and response documents back from COD. Schools must verify that these files can be loaded and processed correctly in their system.

3. When does Phase II testing take place?

Phase II testing assists schools in the identification of potential updates to their system before beginning actual processing for 2005-2006. Phase II is available from **mid-March 2005 through June 30, 2005**. This testing phase is optional.

4. How do schools sign up for Phase II testing?

Schools must complete a signup document in order to participate and schedule a testing window with the COD School Relations Center. The signup document is located at the end of this guide. The completed document must be emailed or faxed to the COD School Relations Center.

5. What do schools need to do when they complete Phase II testing?

Schools should notify the COD School Relations Center when they have completed testing. This will ensure that other schools can begin their testing process in a timely fashion. If a school has shown no testing activity over a two week period, COD will assume your school has completed Phase II of testing, unless you have notified COD otherwise. Also, COD Customer Service will be prepared to monitor the first “live” batch in the production environment.

6. What do schools need to do when they are ready to submit their first “live” batch?

Schools should notify the COD School Testing team prior to submitting their first “live” batch into the production environment. The School Testing team will ensure the batch processes successfully. Upon a successful submission of a batch, the School Testing team will hand over the school to their primary representative

Unstructured Testing

1. Who should participate in Unstructured Testing?

Schools that have participated in Phase I and Phase II of testing for the new award year set up, or wish to submit minor variations to the test cases such as adjustments to the person information, award amounts or disbursement amounts, throughout the award year.

2. What is the purpose of Unstructured Testing?

The purpose of Unstructured Testing is to ensure that schools can correctly create and submit all possible transactions needed for the future award year. Schools continue to use the data supplied within the test ISIR file supplied by COD. Schools cannot create their own student data to submit files during the Unstructured Testing.

3. When does Unstructured Testing take place?

Unstructured Testing is available year round for the current award year processing. Unstructured Testing for 2005-2006 will be available starting **mid-March 2005**. This testing phase is optional.

4. How do schools sign up for Unstructured Testing?

Schools must complete a signup document in order to participate and schedule a testing window with the COD School Relations Center. The signup document is located at the end of this guide. The completed document must be emailed or faxed to the COD School Relations Center.

Note: Full Participant Schools that participated in Phase I and Phase II testing do not need to complete a second signup document, but must schedule a second testing window with the COD School Relations Center.

5. What do schools need to do when they complete Unstructured Testing? Schools should notify the COD School Relations Center when they have completed testing. This will ensure that other schools can begin their testing process in a timely fashion.

Testing Criteria

Test Entry Criteria

In order to begin testing with COD, schools need to complete the following steps:

- Complete a COD School Testing signup document. This is located at the end of this document. Upon completion this needs to be submitted to the COD School Relations Center no later than the assigned phase deadline of May 2, 2005.
- Schedule individual testing date(s) specific for your school(s) for each testing phase. COD School Relations will contact you after the signup document is received.
- Receive a testing Routing ID. The COD School Relations Center will provide this information to you.

Note: Vendors will test using a COD Routing ID for testing purposes only.

- Confirm your test plans and COD readiness. Contact COD School Relations when you are ready to submit.
- Install the latest version of the message class table from SAIG.
- Install and implement the 2005-2006 updates to the software applications.
- Develop a means of keeping testing data segregated from production environment.
- Identify individuals at the school responsible for completing the COD School Testing process and exchange names with COD School Testing team.
- Develop a means of forward dating school's test environment.
- Complete Phase I Common Record Manual Verification Testing, prior to beginning Phase II Structure Application Testing.

Test Exit Criteria

The school and the COD School Relations Center should jointly determine when the school has successfully completed COD testing. The school can select which processes to test and should continue testing until expected results are received. Once the expected results are received, the school can consider testing successful. There is no pre-defined “end” of the test, other than the published end dates for each phase of COD School Testing.

- Determine that school has been able to satisfactorily complete the desired test scenarios by achieving the expected results.
- Choose to discontinue school testing prior to completing all the desired test scenarios if the expected results have been achieved.
- Contact the COD School Relations Center to verify the test results.
- Testing phase window closes prior to test completion by school.

Testing Completion Clean Up

In order to begin the production phase, all test data must be removed from the participating school’s systems. Before submission of production data, schools should ensure that files are sent using the proper production message classes and production destination.

Test Data

The Test Data section explains test data requirements for Phase II-Structure Application Testing. More detail about the test cases can be found in the Full Participant Test Cases document located in Volume V of the 2005-2006 COD Technical Reference.

Full Participant Common Record Test Data

Full Participants are schools that will be processing in the 2005-2006 Award Year using the Common Record in XML format. Schools can use the Common Record Layout in Volume II of the 2005-2006 COD Technical Reference.

COD provides actual CPS test data via an ISIR file to each participating school. Each school processes the ISIR data that COD provides and generates student award transactions using its normal awarding process. Schools are required to send this file to COD using the normal SAIG processing protocols with the exception of the school testing message classes and the COD school testing destination mailbox, which will be provided during a school setup meeting.

Upon submission of each test file, a school receives a “Receipt” file confirming that the file has been received by COD and is in a readable XML format. Once the data has been processed, schools receive a response file indicating the results of each record submitted. If a record rejects, the response record indicates which data element(s) have rejected. Rejected records can then be corrected and resubmitted.

When processing records within the COD test environment, the anticipated time from record submission to receipt of a response file is approximately two business days. If a school has not received a receipt or response within 2 days of submitting the test file, they should contact their School Testing Coordinator at the COD School Relations Center.

Testing Message Classes

Full Participant Schools

Common Record message classes are year specific and are to be used from year to year in the production environment. However, different test message classes must be used for testing. During Phase II testing, schools use the following message classes when sending in Common Records for testing:

Common Record Test Message Classes for Full Participants

Common Record Test Message Classes	
Common Record Documents sent from school to COD	CRTESTIN
Receipts and Responses sent from COD to school	CRTESTOP

School Testing Sign-Up Process

Schools register for testing by completing the Signup Document located at the end of this School Testing Guide and submitting it to the COD School Relations Center. Once the school has submitted the Signup Document, the COD School Relations Center will contact the school by telephone to obtain school-specific information and to schedule specific test dates for the school. The COD School Relations Center will also conduct testing readiness calls to provide additional information such as the testing Routing Number to be used by the school for the phase of testing.

Note: Upon receipt of the signup document, the COD team must complete a considerable setup process to establish the school in the COD test environment before testing can begin. This process can take up to several weeks to complete. Schools should take this setup process into account when planning to participate in COD School Testing and provide enough lead-time in their schedule.

The COD School Relations Center can be contacted by dialing either the Pell number 1-800-474-7268 or the Direct Loan number 1-800-848-0978. When calling, ask for COD School Testing Support, or send email at CODsupport@acs-inc.com with the subject line COD School Testing Support.

Contact Names

Each school participating in testing notifies the COD School Relations Center of their designated contact person on the testing sign-up document. The contact person should be consistent for the period of time before, during, and upon completion of the test. The testing process likely involves a technical resource within the financial aid office. This person should be a technically oriented staff member who is very knowledgeable about the school's financial aid system. This person should be available to assist in problem analysis and to coordinate any follow-up tests that may be required. If a school uses a third-party servicer and the servicer is conducting the test on behalf of the school, COD needs the name and telephone number of the servicer contact person.

Scheduling

The School Testing Signup Document must be completed and emailed to the COD School Relations Center by the appropriate deadlines shown below:

Phase I and Phase II Testing sign up can be completed from December 1, 2004 – May 2, 2005.

Unstructured Testing is a year round process and has no deadline.

When a school completes the School Testing Sign-up Document, the school is contacted by the COD School Relations Center to schedule testing dates within each phase of testing. The time frame for each phase of testing is shown below:

Testing Phase	Testing Phase Description	Start Date	End Date
Phase I	Common Record Manual Verification Testing	01/03/05	05/31/05
Phase II	Structured Application Testing	Mid-March 2005	June 30, 2005
Unstructured	Unstructured Testing	Mid-March 2005*	TBD

*Unstructured Testing is a year round process – this date indicates the release of the next years software.

Support Services

While a school is going through the testing, there are many support sources available for assistance, as listed below:

School Support Services		
Support Service	For Information on the Following:	Contact
School Testing Signup	Registering for School Testing.	Contact COD School Relations Center
ISIR Data Issues	Problems with ISIR data only.	Contact CPS/WAN Customer Service

SAIG	Issues concerning connectivity to SAIG only.	Contact CPS/WAN Customer Service
COD Processing	Issues concerning all items related to Pell and DL processing only.	Contact COD School Relations Center
School Testing Issues	Issues concerning all items related to COD School Testing only.	Contact COD School Relations Center
School Testing Results	To obtain or report School Testing results for COD School Structured Testing only.	Contact COD School Relations Center

Resource Planning

Hardware/Software

Schools should have all hardware and software capabilities ready before testing. Each school should have all upgrades installed from vendors or regulatory releases for 2005-2006.

Roles and Responsibilities

In order for Schools Testing to be completed successfully, it requires a collaborative effort between the participating schools and the COD School Relations Center. The expected roles and responsibilities of each entity are described below:

Schools, Vendors, and Third Party Servicers

Schools are responsible for completing the following steps associated with COD School Testing:

- Review all COD School Testing documentation posted on the IFAP web site.
- Review the COD Implementation Guide in the COD Technical Reference.
- Review all documentation that is emailed to the participating school (if applicable).

- Schedule testing dates with the COD School Relations Center using the signup document via email.
- Prepare a test environment for COD School Testing that uses the test destination mailbox, test message classes, and the test Routing ID.
- Ensure test environment allows forward dating capabilities.
- Prepare test data to execute the Structured COD School Testing scripts for submissions.
- Receive a technical readiness call from the COD School Relations Center after scheduling testing dates for each testing phase.
- Send the test data to COD via the SAIG.
- Retrieve receipts and responses from COD via the SAIG-
- Process submitted receipts-
- Process responses/acknowledgments.
- Communicate results with the COD School Relations Center.
- Remove all data used for testing when completed from the school and/or vendor environment.

Note: Do not use real student data or production data during any phase of testing. Utilize the student data provided in the ISIR provided by COD.

COD School Relations Center

The COD School Relations Center provides the following support during testing:

- Provide and process School Testing Signup documents.
- Schedule specific test dates for schools.
- Conduct technical readiness calls with Schools.

- Provide schools/vendors with their own Testing COD Routing ID to use only during a specific testing phase.
- Process submitted data.
- Send receipts and responses via the SAIG.
- Update schools/vendors of their testing status.
- Assist with issue identification and resolution.
- Provide testing technical guidance.

Lessons Learned from 2004-2005

Schools and vendors that participated in COD School Testing for 2004-2005 provided COD with feedback on their experience. The following sections provide you with insight as to what schools/vendors should test, how to prepare and, and how to schedule testing within your institution.

Should I participate in School Testing?

- All software vendors are encouraged to test their software with the COD System prior to submitting production data.
- Schools that use homegrown or mainframe systems are encouraged to test.
- EDEExpress users do not need to test with the COD System. FSA ensures that EDEExpress is extensively tested each year with COD prior to its annual release(s) to the schools.
- Schools are encouraged to contact their software vendor to discuss their test plans and results. Schools who use a software vendor product do not need to test with the COD System as most software vendors test with COD on their schools behalf's. This helps minimize the need for schools to retest with COD.
- New schools to Title IV Financial Aid, that are not using ED Express, are encouraged to test with COD.

How do I prepare for School Testing?

Before you begin testing, schools should:

- Establish a separate testing environment to keep production data separate from their testing data. Production operations of prior award years and COD School Testing need to be able to occur in parallel without interference.
- Complete all of their development and internal unit testing
- Compare test output files against the published COD Technical Reference and schemas.

- Signup for testing in advance and allow at least three (3) weeks of setup time before you are able to begin testing. COD has considerable setup work to set-up each testing participant to ensure a successful test.
- Identify a strategy for loading fictitious test students several weeks prior to the start of testing. Schools can either manually enter the fictitious test students into their testing environment or accept the simulated CPS ISIR file provided by COD.
- Review the COD Technical Reference and understand the COD process for Pell Grants and Direct Loans.

What can I expect during School Testing?

- Plan to test and start early in the testing window. Do not wait till the end of the testing window to sign-up or begin testing. Allow and plan time for retesting with the COD system.
- Plan and allow time to encounter issues and errors and expect time delays during the resolution process.
- Schools should be very careful to send test files to the correct SAIG mailbox and to use the correct SAIG testing message classes to avoid problems with accidentally submitting data to the COD production environment. Schools that use EDConnect should ensure that they select the correct test message class and not the production message class.
- Proactively contact COD School Relations to resolve issues, provide testing status, and answer questions during the testing process. Schools may experience delays in the testing process while issues are identified, researched, and resolved.
- Communicate to the COD School Relations Center when the school has satisfactorily completed school testing or chooses to discontinue school testing.

School Testing Signup Document

On the following page you will find the School Testing Signup Document. This document should be completed to the best of your ability upon submission. The completed document should be sent to the COD School Relations Center.

Send the completed document to COD School Relations at:

- Email: CODSupport@acs-inc.com, subject of “School Testing Signup”
- Fax: 1-877-623-5082

Definitions of terms in the signup document and what information should be contained in them are listed below.

Field Name	Definition
Organization	If you are a third-party servicer, or software vendor, list your name here.
School Name	If you are a school, list your name here.
COD Routing ID	Enter your Routing ID here. If you are unaware of your Routing ID, you can find this information on the COD web site, www.cod.ed.gov , or contact the COD School Relations Center.
Desired Test Phase	Select the phase(s) of testing that you want to complete, Phase I, II and/or Unstructured. If a school decides to participate in Unstructured they must participate in Phase I and II.
Mainframe	If you are a school, indicate if you use a mainframe system to submit records to COD.
Vendor Product Used	If you are a school, indicate the vendor product/software type you use to submit records to COD.
Organization Type	Indicate if you are a school, software vendor, or third-party servicer.
Testing TG Mailbox #	Enter the TG mailbox number of the mailbox you will be transmitting your test files to and from.
Contact Info (Name, Phone, Email)	Enter the contact information of the person who will be working with the COD School Testing personnel.
Reporting School	Enter the COD Routing ID of the school that will be submitting the records to COD.

Attending School	If it is different from the reporting school, enter the COD Routing ID of the school where student attends class.
Funding Type	If you are a school, enter the funding type here. This would be Advanced, Pushed Cash, Cash Monitoring I, Cash Monitoring II, or Reimbursement.
Expected Testing Readiness Date	The date when you will be ready to begin the School Testing process.



COD School Testing 2005-2006 Sign-Up Sheet

Please complete and send to **CODSupport@acs-inc.com** or Fax to (877) 623-5082

Please allow up to three weeks for the sign-up and set-up processes prior to testing.

Please allow sufficient time for re-testing to meet your specific testing needs.

Date Submitted: _____

Organization: _____

School Name (If Applicable): _____

COD Routing ID (Full Participant Only): _____

Aid Programs (Check all applicable for your test)	() Campus Based	() Pell Grant	() Direct Loan
Desired Test Phase	() Phase I () Phase I, II () Phase I, II & Unstructured () Unstructured	() Phase I () Phase I, II () Phase I, II & Unstructured () Unstructured	() Phase I () Phase I, II () Phase I, II & Unstructured () Unstructured
Mainframe	() Yes () No	() Yes () No	() Yes () No
Vendor Product Used (if applicable)	() Yes () No	() Yes () No	() Yes () No
Organization Type (check all applicable)	() School () Vendor () Servicer	() School () Vendor () Servicer	() School () Vendor () Servicer
Testing TG Mailbox #			
Contact Person (Last, First):			
Contact Phone Number:			
Contact Email Address:			
Additional Contact Info:			
Reporting School ID:			
Attending School ID:			
Funding Type			
Expected Testing Readiness Date:			

